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CLAIMS

What Is Claimed Is:

1. We claim a method for manufacturing vehicle hulls,
5 comprising:
 - applying a protective coating to a bottom mold;
 - applying a protective coating to a top mold;
 - applying a bottom skin coat over a bottom gel coat;
 - applying a top skin coat over a top gel coat;
 - 10 applying a bottom layer of bulk fiberglass over the bottom
skin coat;
 - applying a top layer of bulk fiberglass to the top skin
coat;
 - applying an adhesive to a top mating portion of a top
15 bonding surface and to a bottom mating portion of a bottom
bonding surface;
 - closing the top mold and the bottom mold together, thereby
forming a connector out of the adhesive between the top mating
portion and the bottom mating portion and creating a piece
20 including at least one cavity;
 - forming at least one foam introduction hole through the
outer surface of the piece into the cavity in the piece; and
 - introducing foam into the cavity in the piece through the
foam introduction hole.

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2. The method of claim 1, wherein a space between the top mating portion and the bottom mating portion filled by the adhesive is approximately between 1/8" and 3/4".

3. The method of claim 1, further comprising the step of
30 forming at least one ventilation hole through the outer surface of the piece into the cavity in the piece before the step of introducing foam into the cavity in the piece through the foam introduction hole.

4. The method of claim 1, further comprising, after the
35 step of applying a top skin coat and a bottom skin coat, the step applying reinforcements over the top skin coat and the bottom skin coat.

5. The method of claim 4, wherein the reinforcements comprise one of the group of phenolic and wood reinforcements.

40 6. The method of claim 1, wherein the adhesive is given time to cure before the step of introducing foam occurs.

7. The method of claim 1, further comprising the steps of:

removing air between the bottom gel coat and the bottom
45 skin coat after the step of applying the bottom skin coat over the bottom gel coat; and

removing air between the top gel coat and the top skin coat after the step of applying the top skin coat over the top gel coat;

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8. The method of claim 7, wherein the step of removing air between the bottom gel coat and the bottom skin coat consists of applying vacuum to the bottom skin coat; and

55 the step of removing air between the top gel coat and the top skin coat consists of applying vacuum to the top skin coat.

9. The method of claim 7, further comprising, after removing the air between the bottom gel coat and the bottom skin coat and the air between the top gel coat and the top skin coat, the steps of:

60 checking the hardness of the of the bottom skin coat and the top skin coat; and

grinding out air trapped between the bottom skin coat and the bottom gel coat and the air between the top skin coat and the top gel coat after the top skin coat and the bottom skin 65 coat harden.

10. The method of claim 1, further comprising the step of removing air trapped within the skin coat.

11. A vehicle hull made in accordance with method 1.

12. A vehicle hull made in accordance with method 7.

70 13. We claim a method for manufacturing at least partially hollow vehicle hulls within a top mold and a bottom mold closed together, comprising the steps of:

placing a top hull layer having a top mating surface within a top mold;

75 placing a bottom hull layer having a bottom mating surface
within a bottom mold;

placing a structural adhesive on at least one mating
surface;

closing the top mold and the bottom mold together; and

80 allowing the structural adhesive to cure,

whereby a structural bond is formed between the mating surfaces
by the cured structural adhesive, whereby a unitary piece is
formed within the closed molds.

14. A unitary vehicle hull, comprising:

85 a top hull layer having a top mating surface;

a bottom hull layer having a bottom mating surface;

a structural adhesive placed between the top mating
surface and the bottom mating surface, whereby the structural
adhesive forms a structural bond between the top hull layer and
90 the bottom hull layer, whereby the structural bond increases
the strength of the entire hull.

15. The hull of claim 14, wherein the structural bond
diminishes a need for stringers within the hull.